

CLAIMS:

1. An information recording/reproducing system, comprising:

a magnetic disk apparatus for recording/reproducing information and a host system to which said magnetic disk apparatus can removably be connected and which makes access to said magnetic disk apparatus for recording/reproduction of the information,

wherein said magnetic disk apparatus includes authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself.

2. An information recording/reproducing system according to claim 1,

wherein said magnetic disk apparatus and said host system include authentication key recording means for recording said authentication key, respectively, authentication data generating means for generating authentication data on the basis of said authentication key, respectively, and at least one access control means for controlling access of said host system to information of said magnetic disk apparatus on the basis of the authentication data of said magnetic disk apparatus.

3. An information recording/reproducing system according to claim 1,

wherein said authentication key is generated on the basis of medium defect characteristic of a

magnetic disk which said magnetic disk apparatus includes.

4. An information recording/reproducing system according to claim 1,

wherein said authentication key is generated on the basis of eccentricity characteristic of a magnetic disk which said magnetic disk apparatus includes.

5. An information recording/reproducing system according to claim 1,

wherein said authentication key is generated on the basis of an eccentricity compensating signal for compensating for eccentricity characteristic of a magnetic disk which said magnetic disk apparatus includes.

6. An information recording/reproducing system according to claim 1,

wherein said authentication key is generated on the basis of result of wavelet transformation of an eccentricity compensating signal for compensating for eccentricity characteristic of a magnetic disk which said magnetic disk apparatus includes.

7. An information recording/reproducing system according to claim 1,

wherein said authentication key is generated on the basis of eccentricity compensating signals generated for different cylinders at three locations at the most.

8. An information recording/reproducing system according to claim 1,

wherein said magnetic disk apparatus comprises

means for generating an eccentricity compensating signal for compensating for eccentricity of a magnetic disk which said magnetic disk apparatus includes,

means for enciphering said eccentricity compensating signal on the basis of said authentication key,

means for recording said eccentricity compensating signal enciphered, and

means for deciphering said enciphered eccentricity compensating signal to thereby restore the eccentricity compensating signal before having been enciphered on the basis of said authentication key.